Reducing the speed limit to 20 mph in urban areas

Child deaths and injuries would be decreased

Road traffic accidents continue to pose a major threat to the health of children in the United Kingdom. Attention is often focused on deaths on the road during holiday seasons, but deaths and injuries occur all year round. Britain has one of the worst child pedestrian casualty rates in Europe, with 140 children being killed on its roads each year. There is now a new weapon available to tackle this problem: since last year local authorities have had the power to impose 20 mph (32 kph) speed limits in urban areas.

Speed is a major factor in road accidents. According to the Department of the Environment, Transport, and the Regions, inappropriate and excessive speed on the roads accounts for around 1200 deaths a year. Lack of speed restrictions rather than increased exposure to traffic has been shown to account for the excess deaths among child pedestrians in the UK compared with other European countries such as France and the Netherlands. About 70% of motorists exceed the present 30 mph (48 kph) urban speed limit. And two thirds of all accidents in which people are killed or injured happen in areas with a 30 mph limit.

Despite a fall in road traffic deaths of 36% from 1987 to 1997, the present level of mortality among pedestrians remains unacceptable. As a response to this situation organisations such as the Children's Play Council and the Pedestrian Association have been calling for a limit of 20 mph to replace the current 30 mph speed restriction in urban areas.

Traffic accident casualties fall with lower speed limits

The evidence of increased pedestrian safety at 20 mph is strong. The chance of a pedestrian being seriously injured or killed if struck by a car is 45% if the car is travelling at 30 mph but only 5% at 20 mph. Government research showed that 20 mph zones reduced the incidence of traffic accidents by 60% and cut child pedestrian and child cyclist accidents by 67%, while overall vehicle speeds fell by an average 9.3 mph (14.9 kph). There was no evidence that accidents increased on surrounding roads. Research by local councils produces similar results. For example, Havant Borough Council has imposed a 20 mph limit on 20 miles of road and has seen traffic accident casualties drop by a significant 40%.

There are signs too that a policy of reduced urban speed limits would be acceptable to the public. Among viewers of a Carlton Television programme who responded to a survey, over 80% favoured a 20 mph limit on all residential roads in London. In continental Europe the public response has been largely positive. Graz, in Austria, adopted a 30 kph (18 mph) limit through most of the city, cutting serious casualties by over a quarter and dramatically reducing noise and air pollution. Fewer than 5 people out of 10 supported the initiative when it was first introduced, but 8 out of 10 support it now.

The Association of British Drivers has, however, warned about the dangers of allowing local authorities to set their own 20 mph limits. The association thinks that decisions about where to implement slower speed limits will be made on a political basis, resulting in inappropriate limits on some roads. Inappropriate limits, it argues, will mean that drivers will be more distracted as they focus their attention on the speedometer and not the road ahead. It has called for limits to be "reasonable, consistent and above all, based on sound, established road safety principles."

Certainly there is a danger in focusing solely on lower speed limits as a means of reducing accidents. Other factors that contribute to road related deaths and injuries include alcohol, tiredness, and poor driving skills. Traffic calming measures and education to improve driver behaviour⁵ are also an essential parts of road safety. Education should focus not only on drivers but also on parents and children.

Courts are too lenient

Moreover, imposing lower speed limits in isolation will have only limited impact. The fact that 70% of all drivers currently exceed the 30 mph limit reflects the relatively lenient attitude of the courts towards driving offences.⁴ Proper enforcement is as important as setting the limits in the first place. Nevertheless, if local authorities use lower speed limits sensibly, as part of an overall strategy, then the 20 mph speed limit offers a new opportunity for tackling the problem of child deaths and injuries on the road.

Paul Pilkington trainee public health specialist, South West Region

London School of Hygiene and Tropical Medicine, London WC1E 7HT (paul.pilkington@lshtm.ac.uk)

We ask all editorial writers to sign a declaration of competing interests (bmj.com/guides/confli.shtml#aut). We print the interests only when there are some. When none are shown, the authors have ticked the "None declared" box.

BMJ 2000;320:1160

Huxford R. Child pedestrian safety in the UK: a strategy for reducing child pedestrian casualties. London: Thomas Telford Publishing, 1997. www.ice.org.uk/public/child.htm

² Department of the Environment, Transport and the Regions. DETR annual report 1999: the government's expenditure plans 1999-2000 to 2001-2002. London: DETR, 1999. www.detr.gov.uk/annual99/13htm

³ Department of the Environment, Transport and the Regions. Comparative study of European child pedestrian exposure and accidents. Norwich: HMSO, 1999.

Hibbs J. Councils are given the right to impose 20mph limit. *Daily Telegraph* 1999; 26 Apr.5.
Department of the Environment, Transport and the Regions. "Kill your

⁵ Department of the Environment, Transport and the Regions. "Kill your speed" campaign website. www.detr.gov.uk/campaigns/kys99/index.htm

⁶ Department of the Environment, Transport and the Regions. Road safety strategy: current problems and future solutions. London: DETR, 1997.

⁷ Department of the Environment, Transport and the Regions. Review of traffic calming schemes in 20mph zones. London: DETR, 1996. www.roads.detr.gov.uk/roadsafety/research98/road/6a.htm#S204F

⁸ Rogers B. For fewer deaths and less pollution, reduce speed now. *Guardian* 1999;18 Aug:18.

⁹ Association of British Drivers. ABD's response to the 20mph speed limit consultation. London: ABD, 1999. www.abd.org.uk